AMENDMENTS TO THE CLAIMS:

Applicant respectfully requests that claims 10 and 14 through 16 be canceled, without prejudice, and that the amendments indicated below be made, such that the claims of the application will appear as follows:

1. (Currently amended). A method for treating a complex fluid, comprising:

   a) introducing a supply of complex fluid into a treatment zone, said complex fluid including first and second fluid components that are responsive to light energy;

   b) applying light energy to said complex fluid in said treatment zone, said light energy being supplied from an excimer-based, non-pulsed, non-laser light source that generates a substantially monochromatic light having a designated wavelength of between 260 nm and 310 nm;

   wherein said light energy from said excimer-based non-laser light source is effective to substantially preserve said first fluid component and to substantially excite said second fluid component.

2. (Original). A method according to claim 1, wherein said complex fluid is selected from the group consisting of blood products, pharmaceuticals, injectable solutions and vaccines.

3. (Original). A method according to claim 1, further comprising adding a photoactive compound to said complex fluid prior to applying said monochromatic light thereto.

4. (Original). A method according to claim 1, wherein said excimer-based non-laser light source includes a system for controlling temperature of said complex fluid throughout application of said monochromatic light thereto.

5. (Original). A method according to claim 1, wherein said excimer-based non-laser light source generates said monochromatic light utilizing an excimer gas selected from the group consisting of XeI, Cl_2, XeBr, Br_2, XeCl, filtered XeBr, I_2 and XeF.

6. (Original). A method according to claim 1, wherein said complex fluid treatment involves leukocyte reduction and said first fluid component is a carrier fluid.

7. (Currently amended). A method according to claim 1, wherein said complex fluid treatment involves inactivation of organisms by disrupting one or more nucleic acids of the organisms.

8. (Original). A method according to claim 1, wherein said complex fluid is a blood product selected from the group consisting of whole blood, plasma, platelets, packed red cells and combinations thereof.

9. (Currently amended). A method according to claim ~~1~~ 3, wherein said complex fluid treatment involves ~~generation of specific chemical adducts to a~~ excitation of the photoactive ~~agent,~~ compound, wherein the excited photoactive compound is effective at inactivating one or more organisms; and said first fluid component is not affected by ~~a different set of chemical adducts to~~ said excited photoactive ~~agent.~~ compound.

10. (Canceled).

11. (Original). A method according to claim 1, further comprising mixing said complex fluid during treatment thereof.

12. (Currently amended). A method for treating nucleic acid within a complex fluid, comprising:

a) introducing a supply of complex fluid into a treatment zone;

b) adding a photoactive compound to said complex fluid; and

c) applying light energy to said complex fluid and said photoactive compound in said treatment zone, said light energy being supplied from ~~a~~ an excimer-based non-pulsed, non-laser light source that generates a substantially monochromatic light ~~said light energy~~ having a designated wavelength ~~below~~ less than 340 nm;

wherein said light energy from said light source is effective to substantially excite a nucleic acid and to substantially excite said photoactive compound.

13. (Original). A method according to claim 12, wherein said complex fluid is a blood-based product and further includes biological proteins which are inactivated by ultraviolet light.

14. (Canceled).

15. (Canceled).

16. (Canceled).

17. (Original). A method according to claim 12, wherein said photoactive compound is riboflavin.

18. (Original). A method according to claim 12, wherein said nucleic acid excited by said light energy from said light source is single stranded and belongs to a pathogen.

19. (Original). A method according to claim 12, wherein said photoactive compound is effective at inactivating pathogens with double stranded nucleic acid.